



Model T20550

Magnetic Switch Instruction Sheet

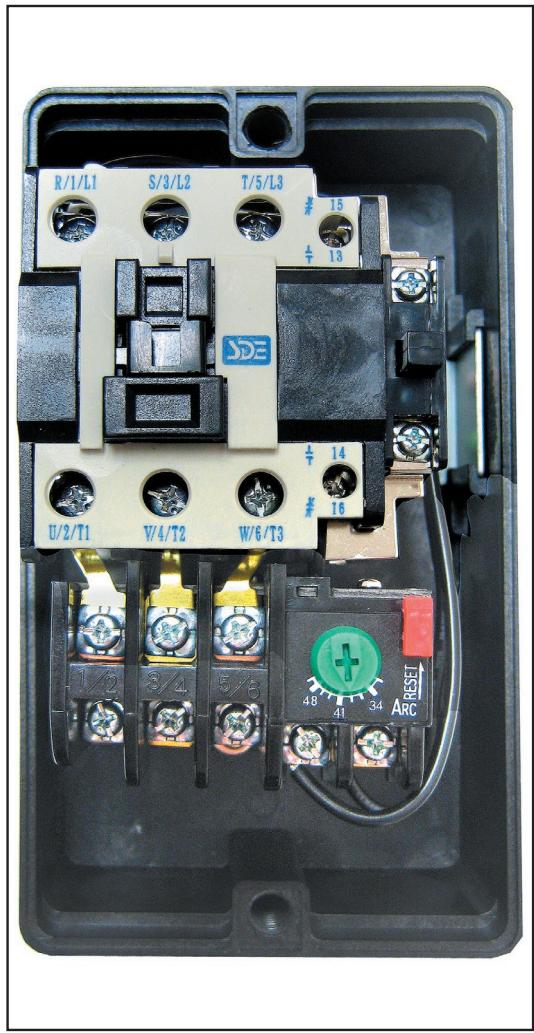
COLOR KEY	
BLACK	Bk
GREEN	Gn
RED	Rd
YELLOW	Yl
WHITE	Wl

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WARNING

Electrocution or fire could occur if this switch is
not installed by a qualified electrician!

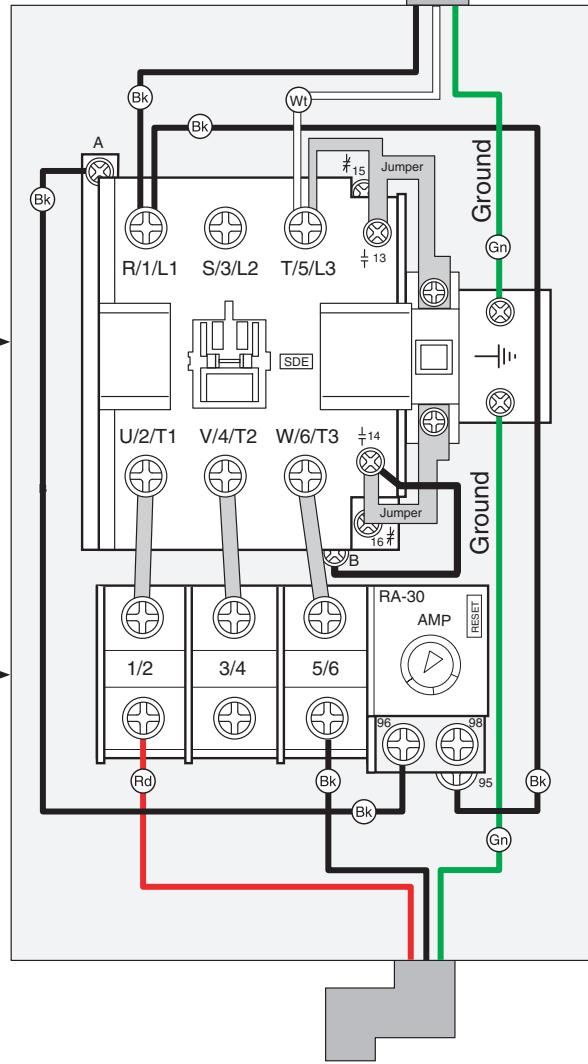
110 Volt
Single-Phase
Power Source



MAGNETIC SWITCH ASSEMBLY

Contactor
SHENDIAN
MA-30
(110V Coil)

Thermal
Overload Relay
SHENDIAN
RA-30
(34-48A)



IMPORTANT: This magnetic switch toggles a motor ON and OFF, and helps provide thermal overload protection for the motor if operating temperature gradually increases due to heavy work loads. The thermal overload relay inside is not designed to cut power in the event of a sudden motor overload or stall.

To help protect a motor from this type of overload, this magnetic switch MUST be connected to a properly sized power supply circuit with a correct fuse or circuit breaker.

OPERATION: The green push button switch allows current to go to the magnetic coil which pulls the contactor closed. Main current now passes through the thermal overload relay and then to the motor. This relay monitors motor current draw. If the motor begins to overheat, this relay breaks the magnetic field, which opens the contactor and cuts current to the motor. The red push button breaks the magnetic field, which opens the contactor and disconnects the current to the motor.

3 HP 110V Motor



Thermal Relay Overload Amp Adjustment Dial:

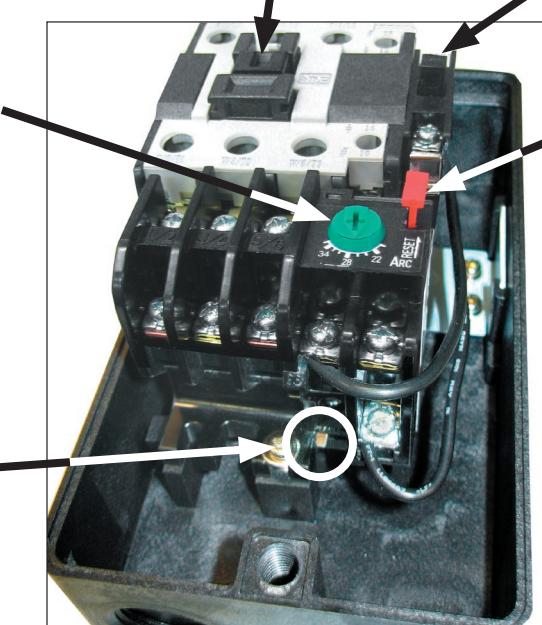
Turn this dial to meet your motor manufacturer's thermal overload amp setting specification. Typically this setting is 100-110% of what is listed on the motor data plate as the max amp load. Remember, turning this dial has no effect on increasing motor horsepower. If this dial is turned to an amp setting that is too high, the motor can overheat and be damaged before the relay trips.

Manual Trip Test Lever:

If the thermal relay function is in question, use a wooden stick or dowel to slide the brown lever to the right. If the motor shuts off, the thermal relay has tripped and is functional. If the motor keeps running, the thermal relay contacts are shorted closed and the relay must be replaced.

Manual Contactor Override Lug:

When pushed, the contactor is manually closed for troubleshooting purposes only.



ON Button:

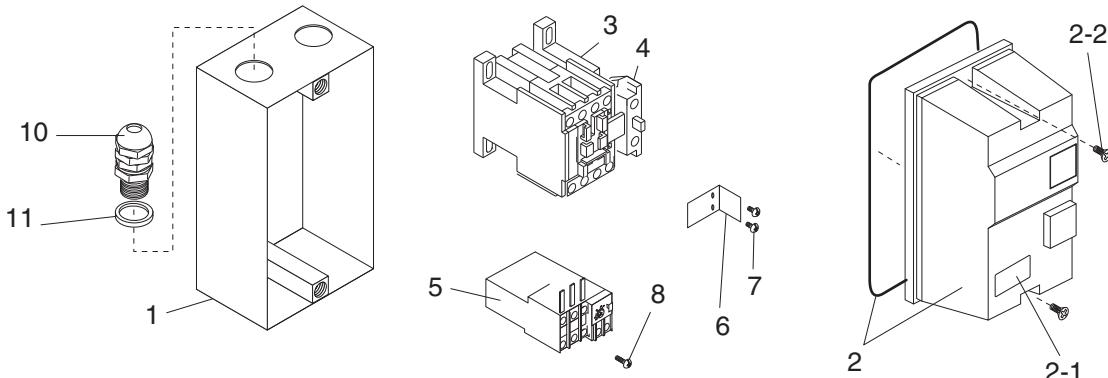
When pushed, power is sent to the magnetic field coil and the contactor closes and sends power to the motor.

Reset Button/OFF Button:

Reset operation: If the thermal relay has tripped, push this button to reset the thermal relay.

OFF operation: If the motor is operating normally, this button will also cut the current going to the magnetic field coil, which opens the contactor and kills power to the motor.

Parts Breakdown



REF PART # **DESCRIPTION**

1	PT20550001	SWITCH BOX
2	PT20550002	SWITCH BOX COVER ASSEMBLY
2-1	PT20550002-1	DATA LABEL
2-2	PT20550002-2	PLASTIC COVER SCREW
3	PT20550003	CONTACTOR MA-30 110V
4	PT20550004	FIELD SWITCH

REF PART # **DESCRIPTION**

5	PT20550005	RELAY RA-30 34-48A
6	PT20550006	CONTACTOR RETAINER
7	PS38M	PHLP HD SCR M4-.7 X 10
8	PHTEK18	TAP SCREW #10 X 5/8
10	P4571010	LIQUID-TITE STRAIN RELIEF
11	P4571011	RUBBER SEAL

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